

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for producing surface-modified work pieces made from a metal and/or one or more alloys, comprising the steps of:

 providing the workpiece which is to be modified, and

 treating the workpiece with at least one modifying agent to obtain the surface-modified workpiece, wherein the at least one modifying agent is at a temperature of at least 0°C to at most 100°C,

 wherein the workpiece to be modified is provided at a temperature of from 300 to 550°C,

 wherein the at least one modifying agent comprises a metal salt of an element from one of transition groups I to VI of the periodic table of elements and a compound of an element from groups V, VI, VII or VIII of the periodic table of elements,

 wherein the at least one modifying agent comprises a controlled atmosphere brazing (CAB) flux,

 wherein the metal salt is in an aqueous phase, the pH of which is between 3 and 10, and

 wherein the treating step comprises contacting the workpiece with at least one modifying agent in aerosol and/or vapor form

wherein the metal and/or one or more alloys is at least one of aluminum, magnesium, copper, an aluminum-based, a magnesium-based, and a copper-based alloy.

Claims 2-9. (Canceled)

10. (Previously Presented) The process as claimed in claim 1, wherein the modifying agent comprises potassium aluminum hexafluoride.

11. (Previously Presented) The process as claimed in claim 1, wherein the modifying agent comprises ammonium fluoride, potassium fluoride, sodium or potassium silicate, sodium or

potassium borate, sodium or potassium aluminate and/or at least one crosslinkable compound, such as for example an organometal, in particular organozirconium or organotitanium compound and/or at least one organosilicon compound or the like.

12. (Previously Presented) The process as claimed in claim 1, wherein the aqueous phase has a pH between 4 and 8.

13. (Previously Presented) The process as claimed in claim 1, wherein the CAB flux has an alkaline pH.

14. (Previously Presented) The process as claimed in claim 1, wherein the modifying agent comprises deionized or distilled water, or an aqueous solution containing ammonia, amines, gases or organic acids or their salts or mixtures thereof.

15. (Previously Presented) The process as claimed in claim 1, wherein the step of treating the workpiece comprises spraying the at least one modifying agent the workpiece.

16. (Previously Presented) The process as claimed in claim 1, wherein the step of treating the workpiece comprises immersing the workpiece in the at least one modifying agent, which is in the form of aqueous solution, or by flooding the workpiece with the at least one modifying agent, which is in the form of the aqueous solution.

17. (Previously Presented) The process as claimed in claim 1, wherein the metal salt, the CAB flux, ammonium fluoride, potassium fluoride, sodium or potassium silicate, sodium or potassium borate and/or sodium or potassium aluminate and/or at least one of crosslinkable compound and/or at least one organosilicon compound is/are used in a matrix to treat the workpiece.

18. (Previously Presented) The process as claimed in claim 17, wherein the matrix comprises organic or inorganic solvents or mixtures thereof.

19. (Previously Presented) The process as claimed in claim 1, wherein the metal salt, the CAB flux, ammonium fluoride, potassium fluoride, sodium or potassium silicate, sodium or potassium borate and/or sodium or potassium aluminate and/or organometal is/are used to treat the workpiece in a concentration of from 10 ppm to 100000 ppm.

20. (Previously Presented) The process as claimed in claim 1, wherein the workpiece to be modified is a heat exchanger.

21. (Previously Presented) The process as claimed in claim 1, wherein the at least one modifying agent includes a biocidal agent and/or a corrosion inhibitor, or the at least one modifying agent produces a biocidal agent and/or a corrosion inhibitor on a surface of the workpiece.

22. (Withdrawn) A surface-modified workpiece, produced by the process of claim 1.

23. (Withdrawn) The workpiece as claimed in claim 22, further comprising an organic or inorganic coating system.

24. (Withdrawn) The workpiece as claimed in claim 23, wherein the coating system includes a biocidal agent and/or has hydrophilic or hydrophobic properties.

25. (Previously Presented) A process for cohesively joining at least two workpieces, comprising the steps of:

- a) providing the workpieces,
 - b) cohesively joining the workpieces to one another, and
 - c) surface-modifying at least one of the workpieces,
- wherein steps b) and c) are carried out together and step c) is carried out as described in the steps of claim 1.

26. (Withdrawn) An apparatus for cohesively joining at least two workpieces, as claimed in claim 25, having a temperature-control chamber and a device arranged in or on the

temperature-control chamber for applying a surface-modifying agent to at least one workpiece.

27. (Withdrawn) The apparatus as claimed in claim 26, wherein the device for applying a surface-modifying agent to at least one workpiece is designed as at least one temperature-controllable spray nozzle.

28. (Previously Presented) The process as claimed in claim 1, wherein the at least one modifying agent is at a temperature of at most 80°C.

29. (Previously Presented) The process as claimed in claim 17, wherein the crosslinkable compound comprises an organometal.

30. (Previously Presented) The process as claimed in claim 29, wherein the organometal comprises organozirconium or an organotitanium compound.

31. (Previously Presented) The process as claimed in claim 19, wherein the metal salt, the CAB flux, ammonium fluoride, potassium fluoride, sodium or potassium silicate, sodium or potassium borate and/or sodium or potassium aluminate and/or organometal is/are used to treat the workpiece in a concentration of from 50 ppm to 10000 ppm.

32. (Previously Presented) The process as claimed in claim 20, wherein the heat exchanger is a CAB brazed heat exchanger.